

SUN SHADE

RELATED APPLICATIONS

This application claims priority on U.S. Provisional Patent Application
Serial Nos. 60/416,968 filed October 8, 2002 and 60/463,491 filed April 17,
5 2003, which are incorporated herein by reference.

FIELD OF THE INVENTION

A sun shade for use with book, more particularly to the sun shade
which is pivotal with respect to the book.

BACKGROUND OF THE INVENTION

10 Sunlight frequently reflects off books and magazines producing a glare
which makes it difficult to read. This is a particular problem around beaches
and swimming pools. Accordingly, it is known and such is disclosed in UK
Patent Application No. 2 317 142 A to provide a screen or shade for a book.
The British patent application discloses a paper or cardboard shade which is
15 folded into a fan or two segments to provide a shade. The shade is attached to
the book with a pair of arms which extend between the shade to two sides of an
open magazine or book. However, if the shade is not in the right position to
block the sun, the reader must move the book to position the screen to shade
the book.

20 SUMMARY OF THE INVENTION

The invention relates to a sun shade apparatus for use with a book. The
apparatus has a mounting apparatus with a clip for mounting sun shade to the
center of the book and a shade member which is pivotable with respect to the
mounting apparatus. The clip may be folded against the shade for storage. The
25 sun shade apparatus is formed of a plastic frame supporting an opaque material
which may be imprinted with a design.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings which form an integral part of the specification and are to be read in conjunction therewith and which like referenced numerals are employed to designate the identical components of the various views:

5 Fig. 1 is a perspective view of a sun shade for use with a book in accordance with the invention;

 Fig. 2 is a perspective view of a sun shade with a cutaway portion in accordance with the invention;

10 Fig. 3 is a side view of a positioning member in accordance with the invention;

 Fig. 4 is a side view of the positioning apparatus mounted to the shade in accordance with the invention; and

 Fig. 5 is a perspective view of a shell device for use with a magazine.

DESCRIPTION OF THE PREFERRED EMBODIMENT

15 As shown in Fig. 1, the present invention relates to a book shade apparatus 10 and includes a shade 12 which is mounted to a book 14 by an attachment device 16. Although shown with respect to a book, the sun shade apparatus 10 may be used with other printed matter such as a magazine, paperback and newspapers. As shown in Fig. 2, the shade 12 includes a frame
20 18 which supports lightweight opaque planar member 20 which is sandwiched between an inner frame member 22 and an outer frame member 24. The planar member 20 may be suitable for transferring identification, such as a logo, trademark, or advertising material. The inner and outer frame members (22,
25 24) form a peripheral frame 26 which has a semicircular portion 28 and a rear portion 30. The rear portion 30 angles from a center portion 32 to the ends of the semicircular portion 29. The angle corresponds to the angle at which a book is normally held open or approximately 150° to 165°. A second pair of arms 34 extends from the center portion 32 to the semicircular portion 28 thereby leaving a large central area 36 between the second pair of arms 34 for
30 imprinting the manufacturer's logo or the like.

As shown in Fig. 2, the outer frame member 24 has a peripheral flange 36 which extends around the edge of the frame 26 to receive the planar member 20 and inner frame member 24 within. The outer frame member 24 has heat stakes 38 which extend through the planar member 20 and are
5 received in holes 40 formed in the inner frame member 22. As shown in Fig. 4, a throughbore 42 is formed at the center to receive the attachment device. The throughbore 42 has a plurality of radially extending notches 44.

The attachment device 16 consists of a positioning member 46 and a clip 48. As shown in Fig. 3, the positioning member 46 has a pair of arms 50
10 which extend normally to a disc 52. Each arm 50 has a longitudinal slot 54 with an inner hole 56 at one end and an outer hole 58 at the other end of the slot 54. The apertures have a diameter slightly larger than the width of the slot 54. A pair of teeth 60 extend radially outwardly from each of the arms to engage the notches 44 of the throughbore 42 and to permit the positioning
15 member 46 to be rotated in the throughbore 42. The teeth 60 are somewhat resilient so that the positioning member can be pivoted from position to position as defined by the notches in the aperture. A pair of stops 62 are formed between the arms 50 to position the clip 46 as further discussed below. The disc 52 rests on the frame 18 to support the positioning member on the
20 frame 18.

As shown in Fig. 4, the clip 48 has an elongated stem portion 64 with a pin support 66 and a pair of pins 68 adjacent one end 70. A resilient S-shaped outer arm 72 extends from the clip 48 adjacent the pin support 66. Each pin 68 extends outwardly from one side of the pin support to be received in the slots
25 54 of the positioning member 46. The pins are spaced at a predetermined distance equal to the length of the slot from the end 20. The pins are compressible slightly to slide in the slots from an outer position (Fig. 2) in the outer holes to an inner position in the inner holes 56 (Fig. 4). In the outer position, the clip is free to pivot within the holes. In the inner position, the end
30 20 of the pin support 66 abuts the surface of the stops 62 and locks the attachment device at a right angle to the plane of the shade 12. Thus, when the

shade apparatus 10 is being used, the attachment device is moved into the inner position locking the shade at a right angle, and the clip 48 is slid down over the center of the book. The shade 12 then may be pivoted with respect to the teeth 60 of the attachment device to position the shade in a proper position to shade the book.

As shown in Fig. 2, when the shade apparatus is not in use, the attachment assembly may be folded by moving the pins to the outer holes 58 and pivoting the clip 48 with respect to the positioning member 46. The clip 48 then lays down against the frame 18 for convenient storage.

As shown in Fig. 5, a shell device 80 may be employed with the sun shade apparatus 10 for use with magazines and/or printed matter which is large or flimsy. The shell 80 has an inner planar surface 82 with a pair of parallel elastic straps 84 which are provided to hold the pages 86 of the magazine on an inner surface of the shell. On the center 88 of an outer surface 90 of the shell 80 is a pocket 92 which is formed to receive the clip 48 of the book shade apparatus 10. The shell 80 may have a fold along the center line to permit closing of the magazine while the magazine is still attached to the shell.

A larger shade may be provided.

Thus is disclosed a convenient apparatus which may be used to shade a book while reading outdoors.

I claim: